

CODE 1 -- OFFENSIVE/URGENT
CODE 2 -- DEFENSIVE/URGENT
CODE 3 -- OFFENSIVE/NORMAL
CODE 4 -- DEFENSIVE/NORMAL

APPLICATIONS BEING PREPARED
PHILIP MORRIS INCORPORATED
PRIVILEGED AND CONFIDENTIAL
19 MARCH 1979

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**622 :T FIBRILLAR CARBONIZED SMOKING ARTICLE/5-15-73
FILED :I N. RAINER AND D. FULL
:C SMOKING SUBSTITUTE MATERIALS + CORE MATERIAL
:D R&D/TOBACCO MATERIALS DEVELOPMENT DIVISION/GANNON/BURNS

:A A MODIFIED SMOKING PRODUCT IS PROVIDED THAT COMPRISES A GAS
:A PERMEABLE, SELF-SUPPORTING CENTRAL CORE OF A CARBONIZED MATERIAL
:A SURROUNDED AND ENVELOPED BY TOBACCO SHREDS AS COMMONLY USED AS
:A FILLER IN CIGARETTES. THE CARBONIZED CORE IS PREPARED FROM A
:A MULTIFILAMENT STRAND OF A FIBROUS CELLULOSIC SUBSTANCE. THE
:A RESULTING SMOKING PRODUCT PROVIDES A REDUCTION IN THE
:A DELIVERY OF PARTICULATE MATTER AND A LOWER COST OF FABRICATION.

:S WLKT (KOTHE)/GEI/2-26-79 EXECUTED AND RETURNED TO WLKT FOR FILING

0000049723

**711 :T DIAMMONIUM PHOSPHATE ADDED TO TOBACCO FILLER TO RETARD CIGARETTE
INACTIVE:T BURN RATE/11-7-75
:I W. GEISZLER, JR. AND W. HOPKINS
:C TOBACCO TREATMENT + ADDITIVE
:D R&D/NEW CIGARETTE PRODUCTS DIVISION/GANNON/MEYER
:S 1-25-79 INACTIVATED BY PATENT COMMITTEE

0-26

**733 :T LOW TEMPERATURE STEAM EXPANSION OF AMMONIUM CARBONATE IMPREG-
CODE 2 :T NATED FILLER/5-6-76
:I H. MERRITT AND G. KITE
:C EXPANSION + HEAT + CO2
:D R&D/MISCELLANEOUS/TOBACCO MATERIALS DEVELOPMENT
:D DIVISION/GANNON/BURNS
:S WLKT (KOTHE)/GEI/11-7-78 CORRECTIONS FOR 1ST DRAFT SENT TO WLKT;
:S 1-25-79 KOTHE SAYS READY TO FILE SOON

**734 :T EXPANSION WITH AMMONIUM CARBAMATE/5-6-76
CODE 2 :I F. UTSCH
:C EXPANSION + OTHER CHEMICAL + HEAT
:D R&D/TOBACCO MATERIALS DEVELOPMENT DIVISION/GANNON/BURNS

:A A PROCESS FOR EXPANDING TOBACCO IS DISCLOSED WHEREIN FINELY
:A POWDERED AMMONIUM CARBAMATE IS APPLIED TO CUT TOBACCO AT A
:A LEVEL BETWEEN ABOUT 3 AND 30% BY WEIGHT OF THE TOBACCO. THE
:A TOBACCO-AMMONIUM CARBAMATE MIXTURE IS HELD AT AMBIENT TEMPERA-
:A TURE AND PRESSURE FOR ABOUT 4 TO 24 HOURS AND THEREAFTER EXPOSED
:A TO HEAT TO EFFECT SUBSTANTIAL EXPANSION OF THE TOBACCO.

:S SAH/3-14-79 REDRAFTED AND SENT TO INVENTORS/MANAGER/DIRECTOR
:S FOR REVIEW

**746 :T DAP ADDED TO TOBACCO FILLER CONTAINING EXPANDED TOBACCO TO
CODE 2 :T RAISE TPM/UNIT WEIGHT/7-27-76
:I W. GEISZLER, JR. AND W. HOPKINS
:C TOBACCO TREATMENT + ADDITIVE
:D R&D/NEW CIGARETTE PRODUCTS DIVISION/GANNON/MEYER

:A A METHOD OF CONTROLLING THE TOTAL PARTICULATE MATTER IN CONTENT
:A OF SMOKE FROM PYROLYSIS OF A SMOKING PRODUCT CONTAINING AT LEAST
:A ONE INGREDIENT MADE FROM AN EXPANDED NATURAL PRODUCT. EXPANDED
:A TOBACCO AS AN INGREDIENT OF A SMOKING FILLER MIXTURE IS TREATED
:A WITH DIAMMONIUM PHOSPHATE IN DIFFERENT CONCENTRATIONS TO YIELD
:A DIFFERENT AMOUNTS OF TOTAL PARTICULATE MATTER PER CIGARETTE
:A DELIVERED TO THE SMOKER.

:S AIP/SEE ALSO PM 711; 2-79 FIRST DRAFT BEING PREPARED

0000049724

**750 :T IMPROVEMENT OF FILLING POWER OF EXPANDED TOBACCO BY HEAT
CODE 1 :T TREATMENT/9-16-76
:I L. SYKES AND H. MERRITT
:C EXPANSION + POST EXPANSION TREATMENT + HEAT
:D R&D/TOBACCO MATERIALS DEVELOPMENT DIVISION/GANNON/BURNS

:A TOBACCO ALREADY EXPANDED BY A RAPID HEATING PROCESS UNDERGOES
:A FURTHER INCREASE IN (REORDERED) FILLING POWER WHEN IT IS GIVEN
:A AN ADDITIONAL TREATMENT WITH HOT GAS SUCH AS AIR OR STEAM.
:A THIS TREATMENT CAN BE LESS DRASTIC (I.E., AT A LOWER TEMPERA-
:A TURE) THAN THE FIRST EXPANSION STEP, AND THUS CAN BE MORE
:A EASILY CONTROLLED. THE PRODUCT, WHILE HAVING SUBSTANTIALLY
:A INCREASED FILLING POWER, IS EQUALLY ACCEPTABLE IN SUBJECTIVE
:A SMOKING TESTS TO THE PRODUCT WITHOUT POST TREATMENT.

:S WLKT (KOTHE)/GEI/10-5-78 COMMENTS ON FIRST DRAFT SENT TO WLKT;
:S 12-78 CONFERENCE WITH KOTHE TO PROVIDE FOR REDRAFTING
:S APPLICATION--SECOND DRAFT EXPECTED ABOUT 2-8

**761 :T METHOD AND SYSTEM FOR CONTROLLING CIGARETTE ROD TOBACCO CONTENT
CODE 1 :T 12-8-76
:I J. NIENOW, F. SHERWOOD, C. IRVING, J. OSMALOV, AND T. LASZLO
:I (RETIRED)
:C INSTRUMENT + MOISTURE METER
:D R&D/MISCELLANEOUS

:A IMPROVED CONTROL OF CIGARETTE ROD CHARACTERISTICS IS ATTAINED
:A BY INTEGRATION OF ROD MASS, FIRMNESS AND MOISTURE CONTENT CHARAC-
:A TERISTICS IN PROVIDING CONTROL SIGNALS TO TOBACCO FEED APPARATUS.

:S GMJS/6-78 FIRST DRAFT DONE BY WLKT; 3-79 SECOND DRAFT NEARLY
:S FINISHED

**768 :T TOBACCO FLAVOR-REACTION PRODUCTS/2-14-77
:I J. SWAIN AND F. CRAYTON
:C FLAVOR + SYNTHESIS
:D R&D/FLAVOR DEVELOPMENT DIVISION/GANNON/DAYLOR

:A REACTION PRODUCTS OF FRUCTOSE, AMMONIA, AND FATTY ACIDS TO
:A FLAVOR TOBACCO.

:S SAH/2-79 INVENTORS/MANAGER COMMENTS RECEIVED--FINAL DRAFT
:S IN PREPARATION

0000049725

**774 :T EXPANDED, STIFFENED TOBACCO/4-30-77
CODE 1 :I N. RAINER AND D. SIWIEC
:C EXPANSION + OTHER CHEMICAL + STIFFENING
:D R&D/TOBACCO MATERIALS DEVELOPMENT DIVISION/GANNON/BURNS

:A TOBACCO STEMS, PREFERABLY BURLEY, ARE TREATED WITH A
:A CONCENTRATED AQUEOUS SOLUTION OF A DIVALENT SALT OF A METAL
:A SUCH AS CALCIUM, MAGNESIUM, ZINC, OR ALUMINUM. THE CHLORIDE,
:A ACETATE, OR NITRATE SALTS OF SAID METALS ARE ACCEPTABLE. THE
:A SALT IMPREGNATED STEMS ARE THEN TREATED WITH A CONCENTRATED
:A SOLUTION OF HYDROGEN PEROXIDE AND AMMONIA FOLLOWED BY WASHING
:A AND DRYING. STEMS TREATED ACCORDING TO THIS PROCESS MAINTAIN
:A THEIR EXPANDED STATE AND HAVE SIGNIFICANTLY INCREASED FILLING
:A CAPACITY: FOR EXAMPLE, 150-170 CC OF FILLING VOLUME PER 10
:A GRAMS OF COMBUSTIBLE MATERIAL VERSUS ABOUT 35 CC PER 10 GRAMS FOR
:A UNTREATED STEMS.

:S SAH/10-14-77 SEARCH COMPLETED; 7-78 COMPLETION REPORT RECEIVED
:S FROM INVENTORS

**779 :T MEANS TO MEASURE TOBACCO FIRMNESS ON CIGARETTE MAKER/5-25-77
CODE 3 :I J. OSMALOV
:C INSTRUMENT + FIRMNESS OF ROD
:D R&D/TOBACCO SERVICES DIVISION/GANNON/OSMALOV

:A A CIGARETTE ROD FIRMNESS CONTROL DEVICE HAS A FIRMNESS DETECTOR
:A HEAD COMPRISING A DIFFERENTIAL TRANSFORMER COUPLED TO A DETECTOR
:A SHOE, WHICH IS BIASED TOWARD AND RIDES ON A DYNAMICALLY-FLOWING
:A ROD OF TOBACCO. THE DETECTOR SHOE IS DISPLACED TO AND FROM THE
:A AXIAL CENTER LINE OF THE TOBACCO ROD IN RESPONSE TO THE FIRMNESS
:A OF THE ROD, WHICH IS DEPENDENT ON THE RATE OF FLOW OF TOBACCO
:A INTO THE ROD FORMING GARNITURE. THE TOBACCO FEED RATE INTO THE
:A ROD FORMING GARNITURE IS INCREASED OR DECREASED IN RESPONSE TO
:A SIGNALS GENERATED BY THE LEVEL AND THE VARIATIONS OF ROD
:A FIRMNESS AT THE DETECTOR SHOE TO CONTROL ROD FIRMNESS TO
:A WITHIN DESIRED LIMITS.

:S GMJS/3-16-79 REDRAFTED

0000049726

**784 :T CONTROL OF MOISTURE IN TOBACCO CURING CIGARETTE MAKING/7-25-77
:I J. OSMALOV
:C INSTRUMENT + MOISTURE METER
:D R&D/TOBACCO SERVICES DIVISION/GANNON/OSMALOV

:A A SYSTEM FOR USING THE OUTPUT OF THE BETA GAUGE IN COMBINATION
:A WITH THE READINGS OF MOISTURE CONTENT OF FILLER IN THE CIGARETTE
:A ROD TO CONTROL THE ADDITION OR REMOVAL OF MOISTURE IN THE
:A PNEUMATIC CONVEYING SYSTEM TO THE MAKER OR BY USING A HAUNI
:A VIBRO UNIT JUST AHEAD OF THE PNEUMATIC SYSTEM.

:S WLKT (DALEY)/GMJS/APPLICATION BEING PREPARED

**791 :T EXPANSION PROCESS FOR UNCURED TOBACCO/10-14-77
CODE 3 :I N. RAINER, G. BOKELMAN, AND J. HEARN
:C EXPANSION + OTHER CHEMICAL + HEAT + HLC
:D R&D/TOBACCO MATERIALS DEVELOPMENT DIVISION/GANNON/BURNS

:A HOMOGENIZED GREEN TOBACCO LEAF AND/OR STEM ARE INCUBATED AT
:A ABOUT 40 DEGREES C FOR 20 HOURS IN THE PRESENCE OF A FLOW OF
:A AIR. THE HOMOGENIZED LEAF CURED (HEREINAFTER HLC) IS THEN
:A TREATED WITH AN ALKALINE HYDROGEN PEROXIDE SOLUTION FOLLOWED BY
:A WASHING. THE EXPANDED HLC IS ROASTED AT ABOUT 200 DEGREES C
:A TO ACHIEVE A 5% WEIGHT LOSS. THE RESULTANT HLC HAS A SIGNIFI-
:A CANTLY INCREASED FILLING CAPACITY, IMPROVED APPEARANCE, AND
:A SMOKING QUALITIES.

:S SAH/RELATED TO PM 797 AND 774; 11-77 SEARCH COMPLETED; 7-78
:S COMPLETION REPORT RECEIVED FROM INVENTORS

**797 :T PROCESS FOR INCREASING THE FILLING POWER OF TOBACCO STEM MATERIAL
CODE 3 :T 10-28-77
:I N. RAINER AND J. HEARN
:C EXPANSION + OTHER CHEMICAL + HEAT
:D R&D/TOBACCO MATERIALS DEVELOPMENT DIVISION/GANNON/BURNS

:A RKS TREATED WITH OZONE FOLLOWED BY TREATMENT WITH ALKALINE
:A HYDROGEN PEROXIDE TO EFFECT EXPANSION. STEMS ARE THEN ROASTED TO
:A OBTAIN 3 TO 75% WEIGHT LOSS.

:S SAH/RELATED TO PM 791 AND 774; SEARCH COMPLETED; 7-78 COMPLETION
:S REPORT RECEIVED FROM INVENTORS

0000049727

**798 :T METHOD FOR MEASURING FIRMNESS WHILE SMOKING OF CIGARETTE AND
CODE 3 :T LENGTH DURING SMOKING OF CIGARETTE/11-1-77
:I J. NIENOW, L. SHAW, AND C. IRVING
:C INSTRUMENT--FIRMNESS OF ROD
:D R&D/TOBACCO SERVICES DIVISION/GANNON/OSMALOV

:A A METHOD FOR MEASURING FIRMNESS OF A CIGARETTE ROD DURING SMOKING
:A FOR DETERMINING EFFECTS OF INCREASED MOISTURE AND TEMPERATURE ON
:A FIRMNESS BEHIND THE COAL OF A BURNING CIGARETTE.

:S GMJS/3-13-79 REDRAFTED AND SENT TO INVENTORS FOR REVIEW

**801 :T AMINO ACID-SUGAR TOBACCO FLAVORANTS/11-16-77
:I L. WU
:C FLAVOR + SYNTHESIS
:D R&D/FLAVOR DEVELOPMENT DIVISION/GANNON/DAYLOR

:A THE REACTION OF SUGAR, ASPARAGINE, OTHER AMINO ACIDS AND
:A ALDEHYDES IN THE PRESENCE OF NH4OH; THE REACTION CAN BE DONE
:A WITH OR WITHOUT ADDED HEAT. THE RESULTING PRODUCT IS USED TO
:A IMPROVE THE FLAVOR OF LOW DELIVERY AND RL CIGARETTES.

:S SAH/3-79 COMMENTS RECEIVED FROM INVENTOR/MANAGER/DIRECTOR
:S MINOR REVISIONS WILL PLACE APPLICATION IN ORDER FOR FILING

**805 :T CONTROLLED DILUTION/11-15-77
FILED :I F. RESNIK
:C FILTER + VENTILATED
:D NEW YORK/MISCELLANEOUS

:A POROUS TIPPING PAPER IS SIZED TO COVER A PORTION OF THE HOLES
:A LEAVING THE EXPOSED POROUS AREA AS A MEANS OF CONTROLLING THE
:A FINAL DILUTION OF THE TIPPING PAPER.

:S AIP/3-16-79 EXECUTED AND MAILED TO PTO

0000049728

**807 :T IMPROVED FLAVOR FORMULATIONS FOR RECONSTITUTED TOBACCO/12-12-77
:I F. DAYLOR, JR., H. SPIELBERG, J. SWAIN, AND D. KEEL
:C RECONSTITUTED + ADDITIVE
:D R&D/FLAVOR DEVELOPMENT DIVISION/GANNON/DAYLOR

:A CHEMICALS ADDED TO CEL IN THE PAPER MADE RECONSTITUTED TOBACCO
:A PROCESS. RELATED PARTICULARLY TO NEW MATERIALS AND/OR
:A MIXTURES RESULTING IN SUBJECTIVE IMPROVEMENTS OVER EARLIER
:A TOBACCO RECONSTITUTED SHEET PERMITTING USE IN TOBACCO BLENDS AT
:A MUCH HIGHER LEVELS (E.G. UP TO 30%).

:S GEI/APPLICATION BEING PREPARED; FURTHER INFORMATION REQUESTED

**808 :T REDUCTION OF "NO" IN TOBACCO SMOKE AND DENITRATION OF TOBACCO
:T 12-6-77
:I G. KERITSIS AND H. MERRITT
:C TOBACCO TREATMENT + DENITRATION
:D R&D/TOBACCO MATERIALS DEVELOPMENT DIVISION/GANNON/BURNS

:A A PROCESS FOR THE REDUCTION OF OXIDES OF NITROGEN IN TOBACCO
:A SMOKE IS DISCLOSED. TOBACCO WHICH HAS BEEN TREATED TO REMOVE
:A NITRATES, AND SPECIFICALLY POTASSIUM NITRATE, IS FURTHER
:A TREATED BY RESTORATION OF THE METALLIC CATIONS, AND ESPECIALLY
:A POTASSIUM CATIONS TO ABOUT ITS ORIGINAL LEVEL IN THE TOBACCO,
:A NEW AND IMPROVED TECHNIQUES FOR DENITRATING TOBACCO USING ANION
:A EXCHANGE RESINS, IONIC MEMBRANE ELECTRODIALYSIS, ELECTRORE-
:A GENERATING ION EXCHANGE DEIONIZATION OR DONNAN DIALYSIS ARE
:A DISCLOSED.

:S SAH/RELATED TO 867; 1-26-79 FINAL DRAFT DISCUSSED WITH INVENTORS
:S REVISING IN VIEW OF NEW DATA AND EXAMPLES RECEIVED FROM INVENTORS

0000049729

**814 :T FILLER EXPANSION WITH WATER/2-6-78
:I P. AUMENT, R. DE LA BURDE, AND F. UTSCH
:C EXPANSION
:D R&D/TOBACCO MATERIALS DEVELOPMENT DIVISION/GANNON/BURNS

:A PROCESS FOR INCREASING FILLING POWER OF TOBACCO WITHOUT USING
:A FOREIGN AGENTS OR EXPENSIVE PROCESSING EQUIPMENT. STEPS
:A INCLUDE: (1) WETTING OF TOBACCO MORE THAN WHAT IS NORMAL IN
:A PROCESSING OF TOBACCO FOR CIGARETTES, (2) ALLOWING TOBACCO TO
:A EQUILIBRATE, (3) RAPIDLY DRYING FILLER TO OV LEVELS BELOW 7%
:A (PREFERABLY BELOW 3%) TO EXPAND AND STIFFEN FIBER STRUCTURE,
:A AND (5) REMOISTURIZING THE "OVERDRIED" CUT TOBACCO TO LEVELS
:A USEFUL FOR CONVENTIONAL CIGARETTE MAKING.

:S WLKT (KOTHE)/GEI/10-27-78 DISCLOSURE TO WLKT FOR APPLICATION
:S PREPARATION--FIRST DRAFT EXPECTED ABOUT 3-1

**821 :T ORIENTAL LEAF PAD SEPARATOR "SYSTEM"/3-17-78
:I R. THATCHER
:C MECHANICAL + SEPARATOR
:D MANUFACTURING ENGINEERING/PASQUINE

:A MODIFICATION TO TORUS FAN ALLOWS LIGHT LAMINAR AND LEAF TO
:A FOLLOW THE VIOLENT AIR PATH WHILE HEAVY PADS STRIKE THE TORUS
:A FAN IMPELLOR AND BREAK UP. THIS IS THE THIRD USE OF THE
:A TORUS FAN PRINCIPLE, EACH VARYING IN END USE HAVING SPECIFIC
:A MODIFICATION ALLOWING DIFFERENT END RESULTS.

:S WLKT (BRANDT)/GMJS/SEE ALSO PM 782 AND 778; PARTIALLY DISCLOSED
:S TO WLKT--FURTHER DISCLOSURE IS PENDING

*823 :T CHARCOAL APPLICATOR FOR FILTER MAKING MACHINES/3-17-78
ILED :I R. BRINKER
:C MECHANICAL
:D MANUFACTURING ENGINEERING/PASQUINE

:A DESIGNED TO PLACE PREMEASURED CHARCOAL GRANULES ONTO FILTER TOW
:A WITH MINIMUM LOSS AND MORE UNIFORM DISTRIBUTION.

:S WLKT (BRANDT)/GMJS/2-7-79 EXECUTED AND RETURNED TO WLKT FOR FILING

0000049730

**824 :T FILTER PAPER STRIPPING DEVICE/3-17-78
:I R. BRINKER AND W. HAMILTON
:C FILTER
:D MANUFACTURING ENGINEERING/PASQUINE

:A DESIGNED TO REMOVE PAPER, NEEDED TO CURE TRIACETIN, FROM FILTER.

:S WLKT (BRANDT)/GMJS/11-7-78 DISCLOSURE TO WLKT FOR APPLICATION
:S PREPARATION; APPLICATION EXPECTED SOON

**828 :T USE OF ALKYLPIRAZINE-CARBONYL ADDUCTS AS FLAVORANTS ON TOBACCO
FILED :T 4-20-78
:I Y. HOUMINER AND E. SANDERS
:C FLAVOR
:D R&D/CHEMICAL RESEARCH DIVISION/OSDENE/JOHNSON

:A REACTION OF ALKYLPIRAZINES AND ALKYLPIRIDINE WITH A CARBONYL
:A COMPOUND IN THE PRESENCE OF A STRONG BASE GIVES RISE TO
:A CONDENSATION PRODUCTS. ADDITION OF SUCH COMPOUNDS TO TOBACCO
:A RESULTS IN IMPROVEMENT IN BOTH MAINSTREAM AND SIDESTREAM
:A SMOKE.

:S D&O/SAH/1-31-79 FILED IN PTO

**832 :T INCREASING THE FILLING POWER OF RECONSTITUTED TOBACCO MATERIAL
CODE 1 :T BY HEAT TREATMENT/5-15-78
:I J. BANYASZ
:C RECONSTITUTED
:D R&D/BIOMATERIALS SCIENCE GROUP/FARONE/HOELZEL

:A TWO-STEP PROCESS TO INCREASE THE FILLING POWER OF RECONSTITUTED
:A TOBACCO. MOISTURE CONTENT OF MATERIAL IS RAISED TO A HIGH VALUE,
:A E.G. 40%. THE MOISTURE CONTENT MAY BE LOWER BUT OPTIMAL RESULTS
:A ARE OBTAINED AT THE HIGHER LEVELS. THE MATERIAL IS THEN HEATED
:A IN AN OVEN FOR SEVERAL HOURS.

:S WLKT (KOTHE)/GEI/11-10-78 DISCLOSURE SENT TO WLKT FOR APPLICATION
:S PREPARATION

0000049731

**837 :T FRACTIONATION OF STANDARD PUFF OF SMOKE FROM A CIGARETTE/5-30-78
FILED :I R. NEWMAN, W. JONES, AND R. JENKINS, JR.
:C MECHANICAL
:D R&D/CHEMICAL RESEARCH DIVISION/OSDENE/JOHNSON

:A SYSTEM IS DESIGNED TO SPREAD THE TPM AROUND THE EDGE OF A
:A CAMBRIDGE PAD. THE PURPOSE FOR SUCH A METHOD OF COLLECTION IS
:A THAT VARIOUS PORTIONS OF A 2-SECOND PUFF CAN BE SEPARATED,
:A ESPECIALLY USEFUL WHEN ISOTOPES, EITHER RADIOACTIVE OR STABLE,
:A ARE INCORPORATED INTO THE FILLER. THE SEPARATION WOULD
:A ASCERTAIN AT WHICH POINT IN THE PUFF THE ADDED MATERIALS ARE
:A ELUTED.

:S GEI/3-7-79 FILED IN PTO

**838 :T IMPROVED PROCESS FOR MICROBIAL NITRATE REMOVAL FROM TOBACCO
CODE 1 :T MATERIALS BY DISSIMILATORY DENITRIFICATION/6-2-78
:I B. SEMP AND D. TENG
:C TOBACCO TREATMENT + MICROORGANISMS
:D R&D/BIOMATERIALS SCIENCE GROUP/FARONE/LOWITZ

:A THE USE OF A VACUUM DURING DENITRIFICATION AFFORDS SEVERAL
:A ADVANTAGES. THE FERMENTATION TIME MAY BE DECREASED, AND
:A INCREASED AMOUNTS OF TOBACCO SUBSTRATE MAY BE TREATED.

:S SAH/6-2-78 FIRST DRAFT COMPLETED--TO INVENTORS; 3-79 ADDITIONAL
:S EXPERIMENTAL WORK BEING DONE TO DETERMINE ADDITIONAL CRITICAL
:S PARAMETERS OF PROCESS

**841 :T VARIABLE AREA ZONE SEPARATOR/7-10-78
:I R. THATCHER, H. ODOM, AND R. EDWARDS
:C MECHANICAL + SEPARATOR
:D MANUFACTURING ENGINEERING/PASQUINE

:A OBJECT OF THE INVENTION IS TO SEPARATE TOBACCO PRODUCT, I.E.,
:A WINNOW PRODUCT, LEAF AND STEM, CHARCOAL AND TOBACCO.

:S WLKT (BRANDT)/GMJS/11-3-78 DISCLOSURE MADE TO WLKT; STILL IN
:S DEVELOPMENT

0000049732

**842 :T NONFILTERING BAFFLE MOUTHPIECE/7-10-78
CODE 1 :I R. DWYER AND M. FLEMING
:C FILTER
:D R&D/PHYSICAL RESEARCH DIVISION/FARONE/LOWITZ/KASSMAN

:A THE EFFECTS OF THE EXIT SMOKE DELIVERY PATTERNS ON THE RESPONSE
:A OF SMOKERS HAVE BEEN INVESTIGATED. PLASTIC BAFFLES WERE ATTACHED
:A TO CIGARETTES WHICH VARIED IN TAR DELIVERY TO DRASTICALLY ALTER
:A THE AEROSOL DELIVERY CONFIGURATIONS, AND IN EVERY CASE IN-HOUSE
:A PANELS COULD PERCEIVE THESE DIFFERENCES. AT 5 MG THEY UNANIMOUSLY
:A FAVORED A NARROW, WELL-COLLIMATED SMOKE STREAM.

:S GEI/APPLICATION BEING PREPARED; 1-9-79 PM DATA BASE SEARCH
:S COMPLETED--CONSIDERABLE ART REVIEWED; INVENTORS AND SPECIFIED
:S INFORMATION REQUIRED

**854 :T TORUS INJECTION ZONE SEPARATOR/3-78
:I R. THATCHER, H. ODOM, AND R. EDWARDS
:C MECHANICAL + SEPARATOR
:D MANUFACTURING ENGINEERING/PASQUINE

:A TORUS FAN USED FOR CIGARETTE RIPPER PAD SEPARATION AND PNEUMATIC
:A CONVEYING TO PROVIDE AN IMPROVED METHOD OF TOBACCO LEAF LAMINAR,
:A LAMINAR AND STEM, AND STEM SEPARATION USING THE LOWEST ENERGY
:A REQUIRED AND TO IMPROVE EQUIPMENT EFFICIENCY.

:S WLKT (BRANDT)/GMJS/11-3-78 DISCLOSURE MADE TO WLKT; STILL IN
:S DEVELOPMENT

**859 :T ROTARY CUTTING KNIFE MOUNTING
FILED :I A. GILLESPIE
:D MANUFACTURING ENGINEERING/PASQUINE
:S WLKT (BRANDT)/GMJS/12-8-78 FILED IN PTO

0000049733

**863 :T POLYURETHANE COATED DRIVE DRUM FOR CIGARETTE MANUFACTURE/12-15-78
:I G. SCOTT AND G. REID
:C MECHANICAL
:D MANUFACTURING ENGINEERING/PASQUINE

:A BY COATING THE EXISTING ALUMINUM DRUM WITH A-75 DUROMETER
:A POLYURETHANE AND GRINDING THE OUTSIDE DIMENSION TO A CALCULATED
:A DIAMETER, THE SURFACE SPEED OF THE GARNITURE TAPE IS PRECISELY
:A SET.

:S GMJS/3-5-79 FIRST DRAFT COMPLETED AND SENT TO INVENTORS FOR
:S REVIEW

**864 :T DEVICE TO MONITOR AND CONTROL PERFORATIONS IN A MOVING WEB
:I E. STULTZ
:C INSTRUMENT
:D MANUFACTURING ENGINEERING/PASQUINE

:A AIR PRESSURE DROP IS PRODUCED ON A MOVING WEB BY MEANS OF A
:A SUCTION BOX THAT IS PUT INTO SURFACE CONTACT WITH A ROW OF HOLES
:A THAT ARE BEING PERFORATED INTO THE WEB. THE PRESSURE DROP IS
:A CREATED BY A VACUUM THAT IS MAINTAINED TO A CONSTANT FLOW LEVEL
:A BY WHAT MAY BE A UNIQUE TECHNIQUE. AN INCREASE OR DECREASE IN
:A DIFFERENTIAL PRESSURE DROP BETWEEN THE SUCTION BOX AND ATMOSPHERE
:A IS USED TO CONTROL PROCESS PARAMETERS IN SUCH A WAY AS TO CORRECT
:A DEVIATIONS FROM THE SET VALUE.

:S WLKT (TORRENTE)/GMJS/RELATED TO PM 697 AND 675; 1-23-79 DISCLOSURE
:S AND DRAWINGS SENT TO WLKT FOR APPLICATION PREPARATION; 2-16-79
:S FURTHER DISCLOSURE MATERIALS SENT

**867 :T NITRATE REMOVAL FROM TOBACCO EXTRACTS USING ELECTRODIALYSIS/1-15-79
:I G. KERITSIS
:C TOBACCO TREATMENT + DENITRATION
:D R&D/TOBACCO MATERIALS DEVELOPMENT DIVISION/GANNON/BURNS
:S WLKT (KOTHE)/SAH/DIVIDED OUT OF 808; 1-25-79 DISCLOSURE TO WLKT FOR
:S APPLICATION PREPARATION

**868 :T USE OF 1,2-BIX(2-PYRAZYL)ETHANES AND 1-(2-PYRAZYL)-2-(PYRIDYL)
:T ETHANE AS FLAVORANTS ON TOBACCO/1-22-79
:I Y. HOUMINER AND E. SANDERS
:C FLAVOR
:D R&D/CHEMICAL RESEARCH DIVISION/OSDENE/JOHNSON
:S D&O/SAH/2-22-79 DISCLOSURE TO DEPAOLI FOR APPLICATION PREPARATION;
:S 3-7 ADDITIONAL INFORMATION REQUESTED FROM INVENTORS

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